Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



aHV555 .U6M87 1989



United States Department of Agriculture

Forest Service and Office of International Cooperation and Development

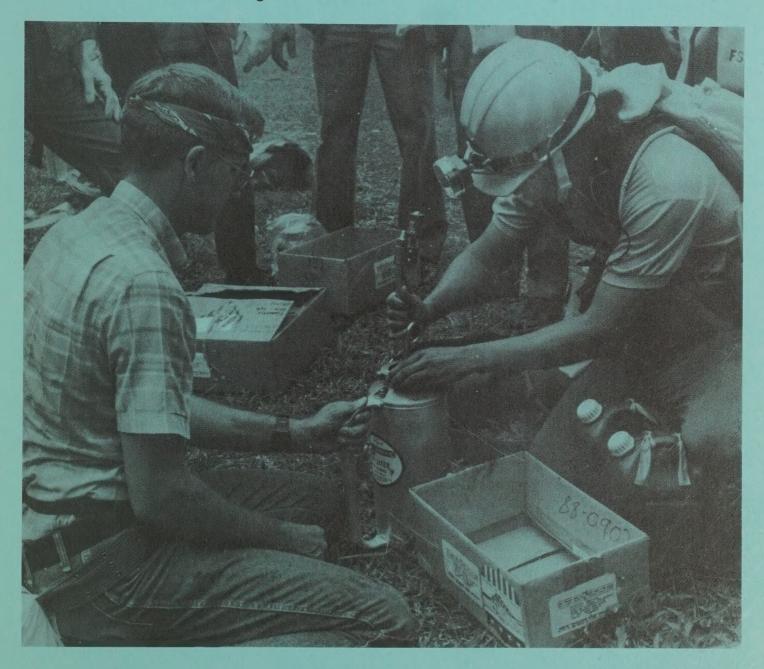
Sponsored by the United States Agency for International Development

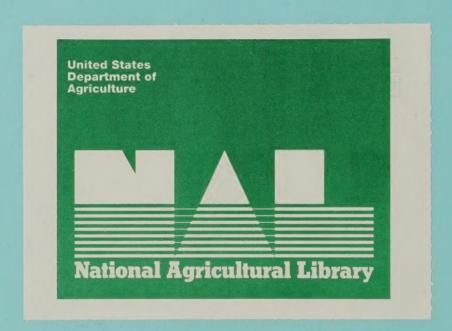


Progress Report of the Disaster Assistance Support Program



December 1989 Washington, D.C.





Cover Photo: John Shepherd, North Carolina Division of Forest Resources, in Indonesia at Wildfire Suppression Training Course



Progress Report of the Disaster Assistance Support Program



Robert W. Mutch

December 1989

Disaster Assistance Support Program
International Forestry
USDA Forest Service

United States Department of Agriculture Forest Service Office of International Cooperation and Development United States Agency for International Development
Office of U.S. Foreign Disaster
Assistance

Progress Report of the. Disaster Assistance Support Program



ristalić W rodoži

December 1910

Discotor Assistance Support Program International Forestry USDA Horest Staylor

Control States County for Security States County States Co

Corner Service De automate of Agreembleron Contract Service of International Conpensation

TABLE OF CONTENTS

			Page
Foreword		 	iii
Abstract		 	1
Introduction		 • • • • • • • •	1
Office of U.S. Foreign Disaster Assistance		 	3
Disaster Assistance Support Program		 	4
Emergency Response Process		 	5
Disaster Assistance		 	7
Prevention		 	12
Preparedness		 	13
Training and Simulations		 	15
Meetings and Workshops		 	20
Forest Service's Commitment to International Assis	stance	 	24

PERSONAL PROPERTY.

A STATE OF THE STA

THIS PAGE IS INTENTIONALLY LEFT BLANK



INTERNATIONAL DISASTER ASSISTANCE

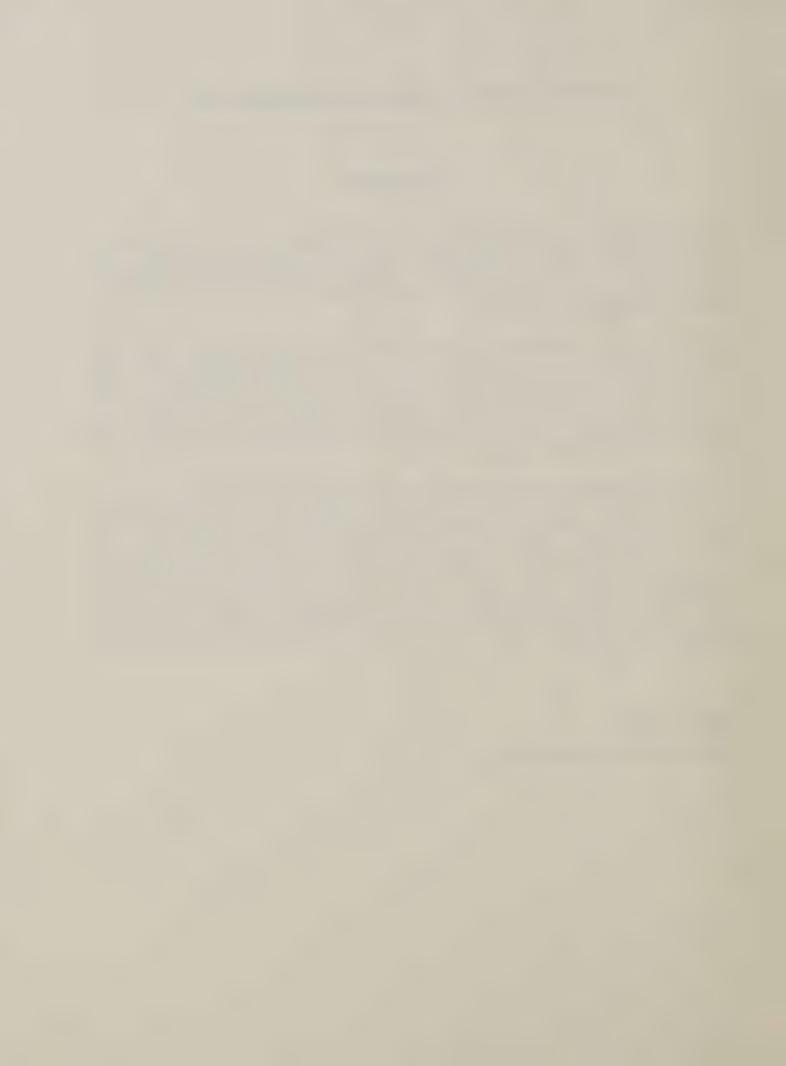
FOREWORD

Forest Service line officers and employees continue to enthusiastically support and participate in the U.S. Department of Agriculture's (USDA) Disaster Assistance Support Program (DASP). Even under conditions of very short notification for emergency assignments, steadfast personal and professional commitment permits DASP to respond rapidly to requests from the Office of U.S. Foreign Disaster Assistance (OFDA).

The Bureau of Land Management, the National Park Service, and other agencies have maintained high levels of cooperation in providing personnel for international assignments. This office acknowledges the continued outstanding support by Fire and Aviation Management, the Boise Interagency Fire Center, the National Advanced Resources Technology Center, and USDA's Office of International Cooperation and Development (OICD) in helping to achieve international disaster management objectives. DASP looks forward to further expanding interagency involvement and cooperation with international emergency activities.

One of the most satisfying aspects of DASP is the fact that wildland resource management agencies have many dedicated individuals with excellent disaster management skills. It is noteworthy that there is such a large number of individuals who not only possess such good capabilities, but who also are personally ready to respond at a moment's notice for difficult and challenging assignments. Not only do they respond well to the challenges, they all express interest in participating again. Assignments in 1988 were filled once more with a wide variety of people, including meaningful opportunities for women and minorities. We also acknowledge the commitment of line officers who actively supported the mobilization of their people for assignments around the world. We wish to convey our deepest appreciation to all who have given so much of themselves and their experience to help others.

Robert W. Mutch Program Manager Disaster Assistance Support Program



ABSTRACT

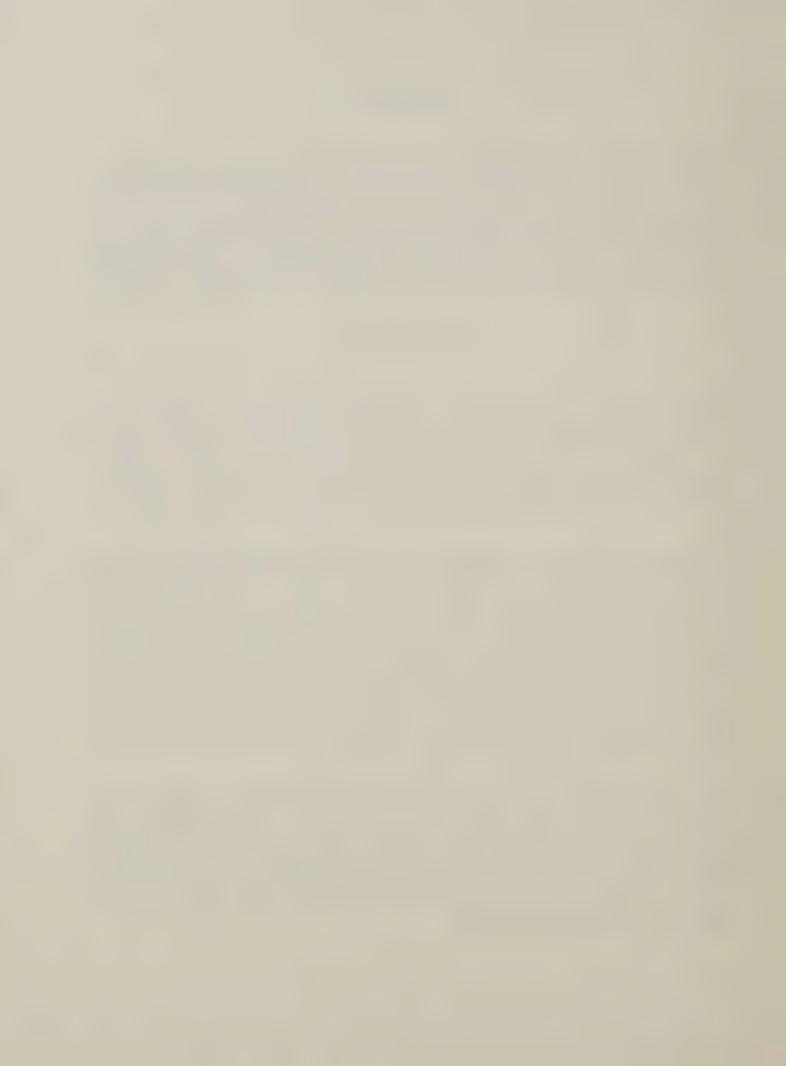
A Resources Support Services Agreement between the Agency for International Development (A.I.D.) and USDA's OICD specifies the Forest Service's role in providing people and equipment to fulfill international requests for disaster assistance. This agreement led to the 1985 establishment of a natural resources-related DASP within the Forest Service's International Forestry staff. Since the establishment of the program, many accomplishments and objectives have been achieved. This report describes those program accomplishments, meeting DASP's disaster prevention, preparedness, and emergency response objectives in Fiscal Year 1988 for OFDA. A statement of the Forest Service's continuing commitment to its close partnership with A.I.D. is included in the Summary.

INTRODUCTION

This second annual report describes how USDA's DASP has helped A.I.D.'s OFDA achieve disaster response and disaster management objectives during Fiscal Year 1988. DASP is located within the Forest Service's International Forestry staff and its activities are funded through an agreement between A.I.D. and USDA's OICD. The agreement forming DASP was signed in August 1985 and the new Forest Service program was fully staffed during 1986 by a Program Manager, Disaster Management Specialist, and Program Secretary. This report highlights the assistance provided by DASP to OFDA and A.I.D. Missions located in Latin America, Africa, and Asia.

Responding to locust control emergencies in Africa continued to be a high priority task in Fiscal Year 1988, and DASP provided many individuals to serve in logistical and operational capacities in several countries. Because of the severity of the locust outbreaks across the Sahel and North Africa, A.I.D. formed a Desert Locust Task Force under the direction of OFDA and asked DASP to provide an Operational Specialist to serve as a member of the Task Force. Ron Libby of the Forest Service's Siuslaw National Forest in Oregon was selected as a highly qualified individual to fill this position. Ron has had extensive experience in spruce budworm control programs in the Pacific Northwest and also had worked for OFDA on several locust control assignments in Africa during the preceding year. Ron joined DASP in August 1988 to resume his new duties with the Desert Locust Task Force. One outcome of the Harpers Ferry Grasshopper/Locust Campaign Evaluation Workshop was the production of an Operations Guidebook that provided direction to A.I.D. Missions in combatting future outbreaks.

Other personnel changes occurred within DASP during 1988. DASP welcomed Lynn Penrod to our program in July as Program Secretary and she has been able to effectively standardize office management procedures. Chuck Mills, who had been a mainstay of DASP since its inception, retired from the Forest Service in December. Chuck is obviously missed, but we feel fortunate in being able to fill the vacant Disaster Management Specialist position with Tom Frey from the Alaska Fire Service in Fairbanks. Tom's experience in interagency emergency management and fire coordination provides him with the type of background desired by OFDA. Tom also had two earlier short-term assignments with OFDA.



In addition to providing emergency response personnel to OFDA for disasters in Africa, Asia, and Latin America in Fiscal Year 88, DASP continued to provide support to disaster prevention and preparedness measures through technical assistance assignments, simulation exercises, training courses, workshops, and conferences. Personnel mobilized to fulfill OFDA's objectives included individuals from the Bureau of Land Management, National Park Service, and North Carolina Division of Forest Resources, people from the Forest Service's National Forest System, State and Private Forestry, and Research organizations, and individuals from USDA's Animal and Plant Health Inspection Service (APHIS) and Agricultural Research Service (ARS).

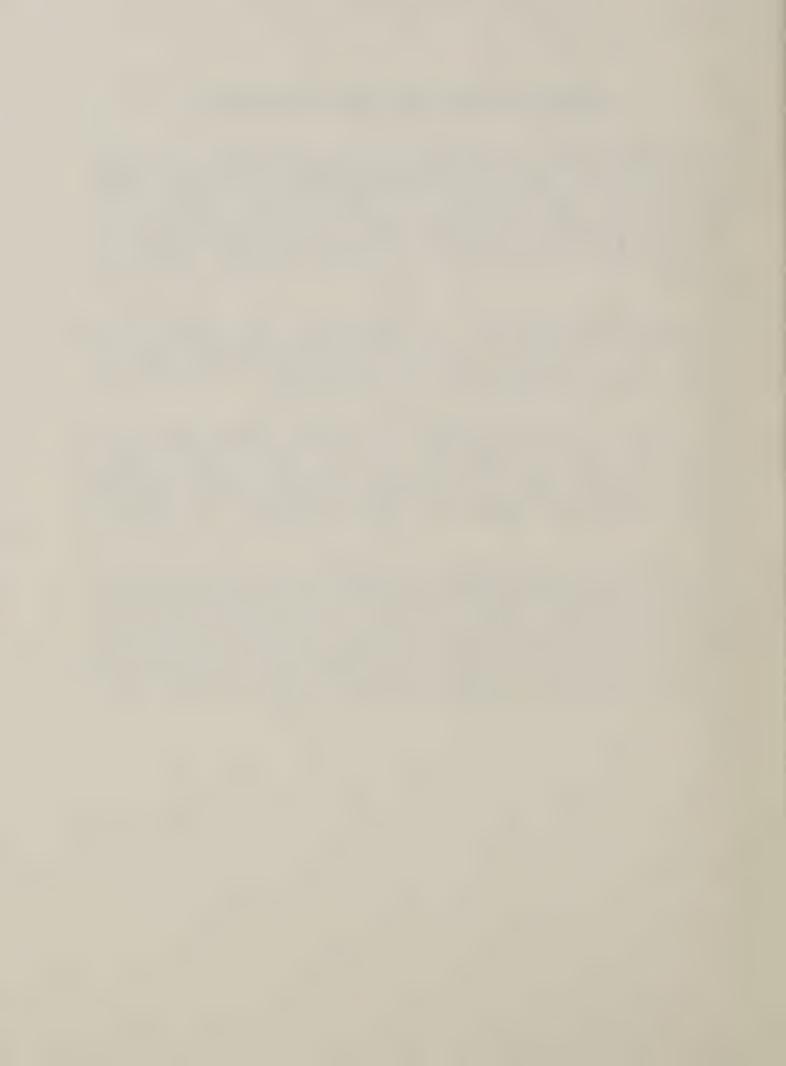
OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE

The U.S. Congress made its first foreign aid appropriation in 1812, when it delivered \$50,000 worth of food and other supplies to victims of a massive earthquake in Venezuela. Since then, assistance was given independently by various federal agencies in response to international disasters. However, it wasn't until 1964 that the need for one central office to coordinate all U.S. Government (USG) assistance was identified. In that year A.I.D. named OFDA to be the overall USG Disaster Relief Coordinator. As mandated by Congress, OFDA provides aid not only for international disaster relief and rehabilitation, but also for disaster preparedness, early warning and mitigation.

The Director of OFDA reports directly to the A.I.D. Administrator, who is the President's special coordinator for international disaster assistance. OFDA's three geographic divisions (Africa and Europe, Asia and the Pacific, and Latin America and the Caribbean) provide country-specific expertise to relief and preparedness needs in each region. OFDA also has an Operations Support Division responsible for coordinating relief activities during a disaster.

On the average, OFDA responds to approximately 50 requests for emergency assistance each year and monitors another 40 potential situations. When disaster strikes, OFDA mobilizes USG resources and coordinates the USG response with that of voluntary agencies, international organizations, and other donors. To deliver emergency relief rapidly to the disaster site, OFDA maintains stockpiles of disaster supplies at five regional locations worldwide. The beneficiaries of this relief are primarily those in developing countries who are least able to survive without outside aid.

Once OFDA has been notified that a formal disaster declaration has been made by the U.S. Ambassador, it will immediately provide funding and guidance to the Ambassador or the Mission. Following a disaster declaration, OFDA must approve any assistance or expenditure over \$25,000. Based on needs identified by OFDA-funded assessment teams and other available information, OFDA furnishes relief in the form of technical specialists, commodities, services, or transportation. OFDA can usually deliver relief supplies in 24 to 72 hours after the disaster strikes from its worldwide regional stockpiles. Commodities may either be granted or lent, and the host government is urged to recover and maintain reusable items, such as tents.



DISASTER ASSISTANCE SUPPORT PROGRAM

DASP is a USDA program funded by OFDA to provide disaster prevention, preparedness, technical assistance, and emergency relief support to A.I.D. and cooperating countries in areas related to natural resource emergencies. The program has roots in the early 1980s when cooperative efforts between OFDA and the Forest Service began with wildfire assistance on the Galapagos Islands and in Costa Rica, emergency personnel dispatched to the earthquake disaster site in Mexico City in 1985, and administration of an OFDA-funded, Spanish-speaking fire suppression course for Latin America. The relationship between OFDA and the Forest Service was formalized in August 1985, when a Resources Support Services Agreement between A.I.D. and USDA's OICD established DASP within the International Forestry staff of the Forest Service. Program objectives include:

- 1. Operational Support to provide technical support in prevention, preparedness, and operational planning for natural resources-related disasters;
- 2. Planning and Training Assistance to strengthen disaster planning and training for OFDA, U.S. Embassies/USAID Missions and host countries;
- 3. **Identification of Emergency Personnel** to provide OFDA with the capability to identify and access natural disaster-related technical experts and disaster management specialists;
- 4. Dissemination of Information to assist in the planning and coordination of workshops, conferences, studies, and publications that promote effective disaster prevention, disaster preparedness, and disaster management; and
- 5. Disaster Assistance to augment the disaster relief efforts of OFDA, U.S. Embassies/USAID Missions, and host countries with technical experts and disaster management specialists on a short-term basis.

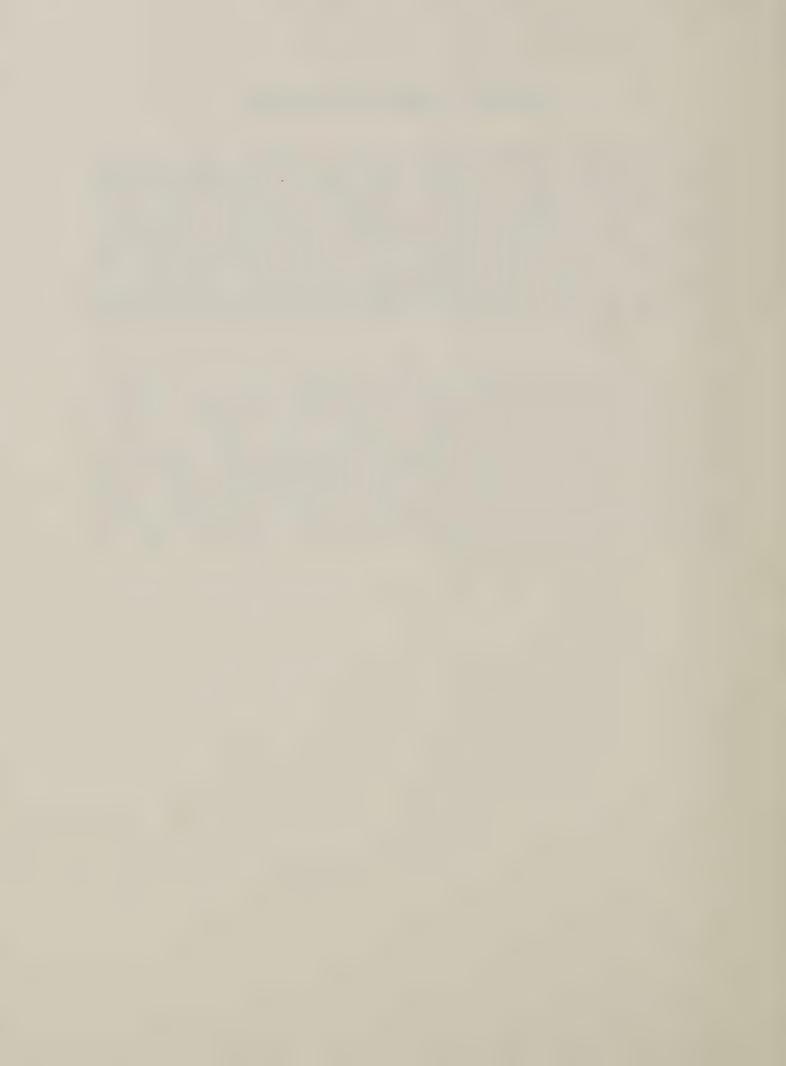
The DASP staff develops an annual plan of work to achieve OFDA's long-term and short-term objectives in prevention, preparedness, technical assistance, training and disaster relief. Project activities are accomplished by the DASP staff and other specialists recruited for short-term assignments in the United States and overseas. Other agencies, consultants, private individuals and companies, and university personnel with disaster management experience also may be recruited for assignments.



EMERGENCY RESPONSE PROCESS

As the objectives indicate, DASP may provide individuals to OFDA for technical assistance or emergency assignments. Time is not usually a critical factor in notifying people for technical assistance assignments and these are ordinarily filled through normal administrative channels. However, emergency assignment of personnel is time-sensitive. Therefore, an operating plan was approved in 1987 which defined the emergency response process to facilitate decision making and rapid mobilization of essential individuals to assist OFDA during an international disaster. Roles and responsibilities are now clearly understood so that key organizations and their personnel are informed in a timely manner, thus insuring an effective, efficient response. Development of the operating plan was closely coordinated with personnel from Fire and Aviation Management and other participating agencies. Figure 1 graphically displays the DASP international disaster response process.

The response process is a well-defined one. After a formal request for emergency assistance has been received by DASP from OFDA, DASP prepares a situation status report that includes a summary of the personnel, equipment, and supplies being requested. This assessment is transmitted to Fire and Aviation Management, who contacts the Deputy Chief for State and Private Forestry. Once the Deputy Chief determines that the Forest Service will respond to the emergency request, OFDA and the Boise Interagency Fire Center (BIFC) communicate directly on resource orders. DASP facilitates the mobilization of personnel through Forest Service Regions or BIFC. Personnel to respond to an international emergency are identified through the Forest Service's computerized disaster management skill file (roster), fire qualification red card system, preidentified teams, or selections based on requested skills. BIFC also may provide equipment and supplies using established incident mobilization procedures.



The International Emergency Response Process

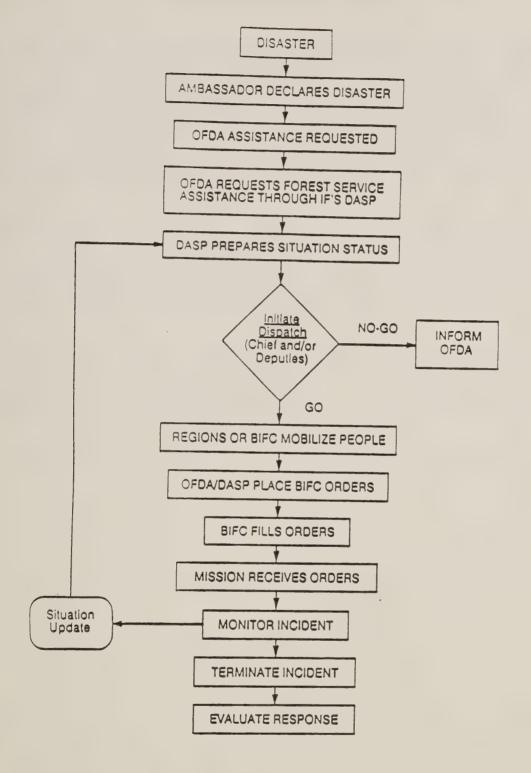
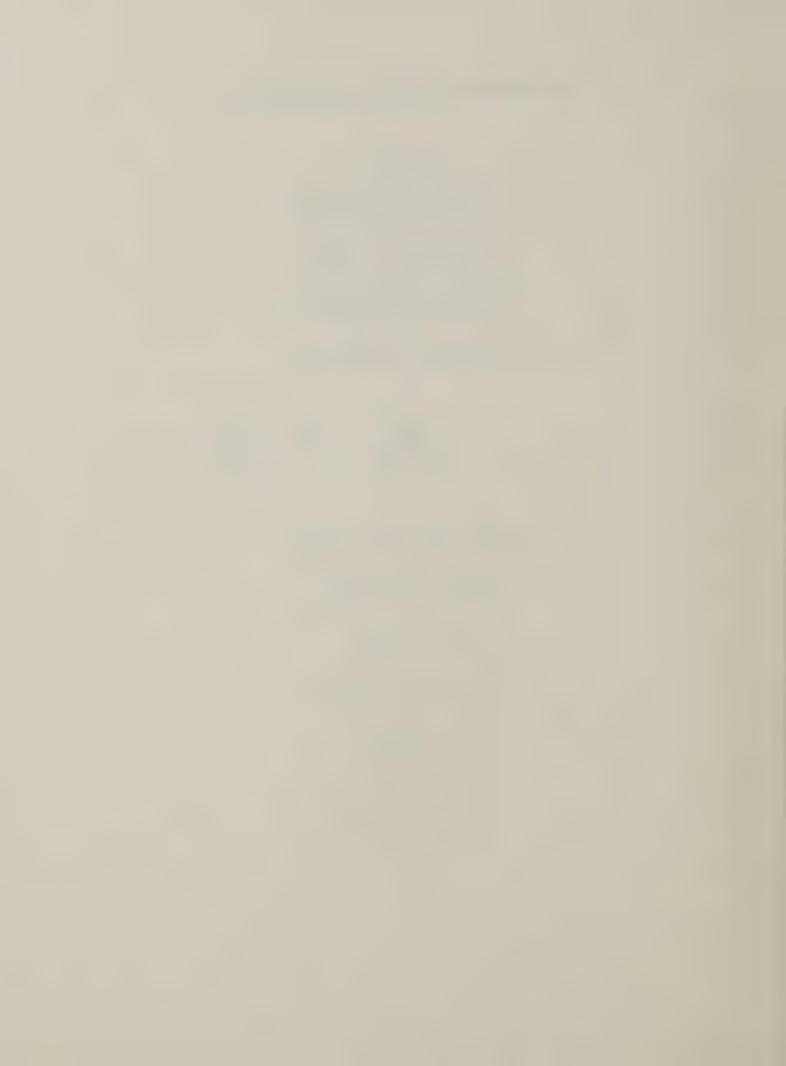


Figure 1



DISASTER ASSISTANCE

DASP is charged with providing disaster assistance support primarily for natural resources-related emergencies. Wildfire disasters in countries such as Argentina, Australia, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Italy, Indonesia, and Mexico have been so significant as to bring requests to and responses by OFDA for assistance. Although other large-scale natural disasters have received more media attention, the threat from major forest fires to human lives, property, and natural resources is extremely serious given the increasingly close proximity of wildlands and urban areas. Recent wildfires in Australia, China, Indonesia, and most recently, the wildfires in Yellowstone Park, demonstrate the profound nature of the problem and its impact on public health as well as local economies.

The grasshopper/locust control problem in Africa has been the most significant emergency in 1988 for DASP. Following a period of drought and famine, rains fell over much of Africa after 1985, creating ideal environmental conditions for upsurges of locust and grasshopper pests. If uncontrolled, these pests can form populations of plague proportions that can threaten destruction of crops, thus devastating economies of developing countries just recovering from years of drought. In 1988, DASP responded to five declared grasshopper/locust disasters.

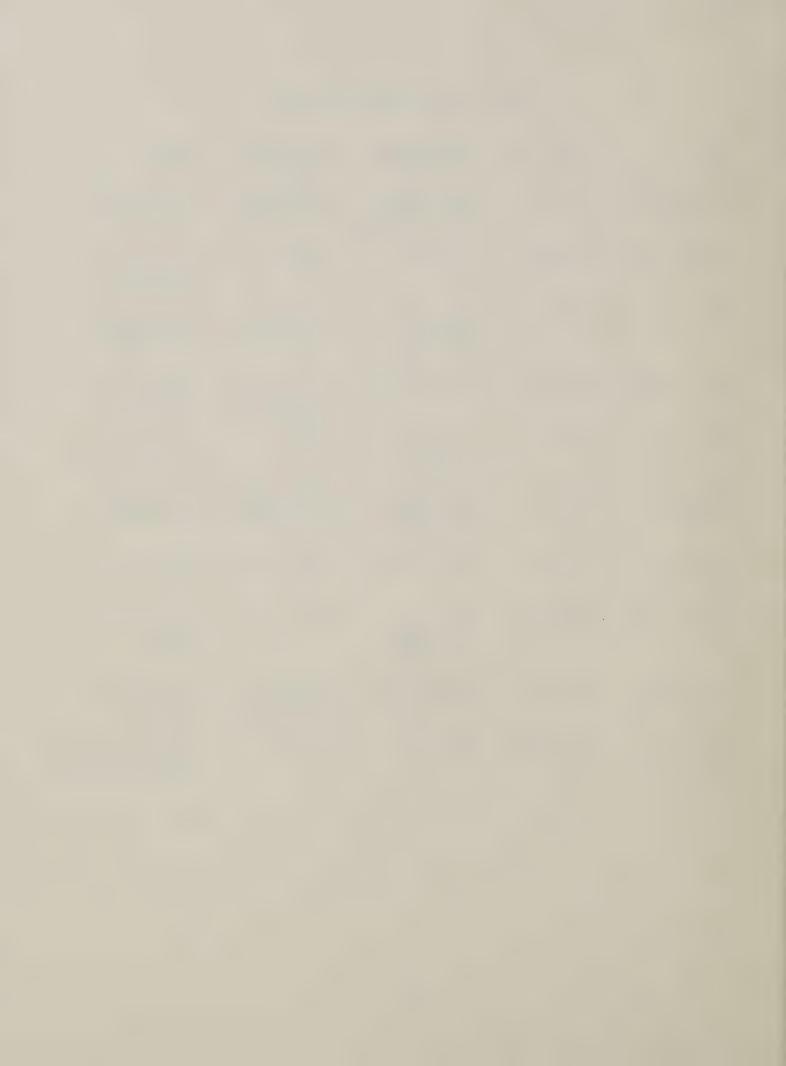
Finally, other natural resource disasters such as floods, hurricanes and typhoons, drought, earthquakes, and landslides occur on a periodic basis and DASP has been called upon to provide assistance. Skills and experience gained with other types of natural resources emergencies are often applicable. Two such responses were made in 1988 to emergencies caused by Hurricane Gilbert in Jamaica and by the Bangladesh flood.

DASP provided personnel or equipment for a total of ten disasters in Fiscal Year 1988.



Disaster Responses in Fiscal Year 88

Date	Country	Respondent(s)	Disaster Type	Purpose
November 1987- January 1988	Morocco	Ron Libby Rudy Tantare Charlie McDonald	Grasshopper/ Locust Control	Air Operations and Logistics
November 1987	Indonesia	Chuck Mills	Wildfire	Fire Management Assessment
April 1988	Tunisia	Herb Corn Dick Stiliha Jim Walker	Grasshopper/ Locust Control	Air Operations and Logistics
April-May 1988	Morocco	Walter Friauf	Grasshopper/ Locust Control	Air Operations and Logistics
June 1988	Mexico	Four Fire Specialists	Wildfire	Fire Management Assessment
August- November 1988	Sudan	Ron Libby Lynn Thomas Don Albright	Grasshopper/ Locust Control	Air Operations and Logistics
September- October 1988	Jamaica	Kim Peterson	Hurricane	Communications
September 1988	Bangladesh	Barry Stern Bruce Bayle Chuck Mills	Flood	Operations and Logistics
September- October 1988	Mauritania	Richard Dysart Billy Tanner	Grasshopper/ Locust Control	Air Operations and Assessment
September- October 1988	United States	Bob Mutch	Wildfire	Yellowstone Operations and Planning Support



Morocco Grasshopper/Locust Control Project #1

OFDA requested a 2-person pesticide application team on November 5, 1987, to coordinate an aerial pesticide program in Morocco with two OFDA-funded Turbo Thrush spray planes. Ron Libby, Siuslaw National Forest, Oregon, had recently returned from a 3-month assignment in Senegal, Mali, and Mauritania. Rudy Tantare, Siskiyou National Forest, Oregon, joined him as the other member of the team in Morocco on November 9. They served as air operations specialists in the Atlas Mountains in southern Morocco.

After treating roughly 27,400 hectares over a two-month period, they were relieved by Charlie McDonald, Angeles National Forest. McDonald closed out the spraying contract, obtained a physical accounting of empty and full pesticide barrels remaining in-country, and reviewed barrel disposal procedures with the local team. He then helped begin development of an Operations Plan for future locust control actions for U.S. Mission personnel in Rabat. He also agreed to provide suggestions and recommendations to the Crop Protection Service to improve future operations, as requested by the Government of Morocco. McDonald and Libby prepared these recommendations and submitted them to OFDA for transmittal to the Mission.

Indonesia Tropical Forest Fires

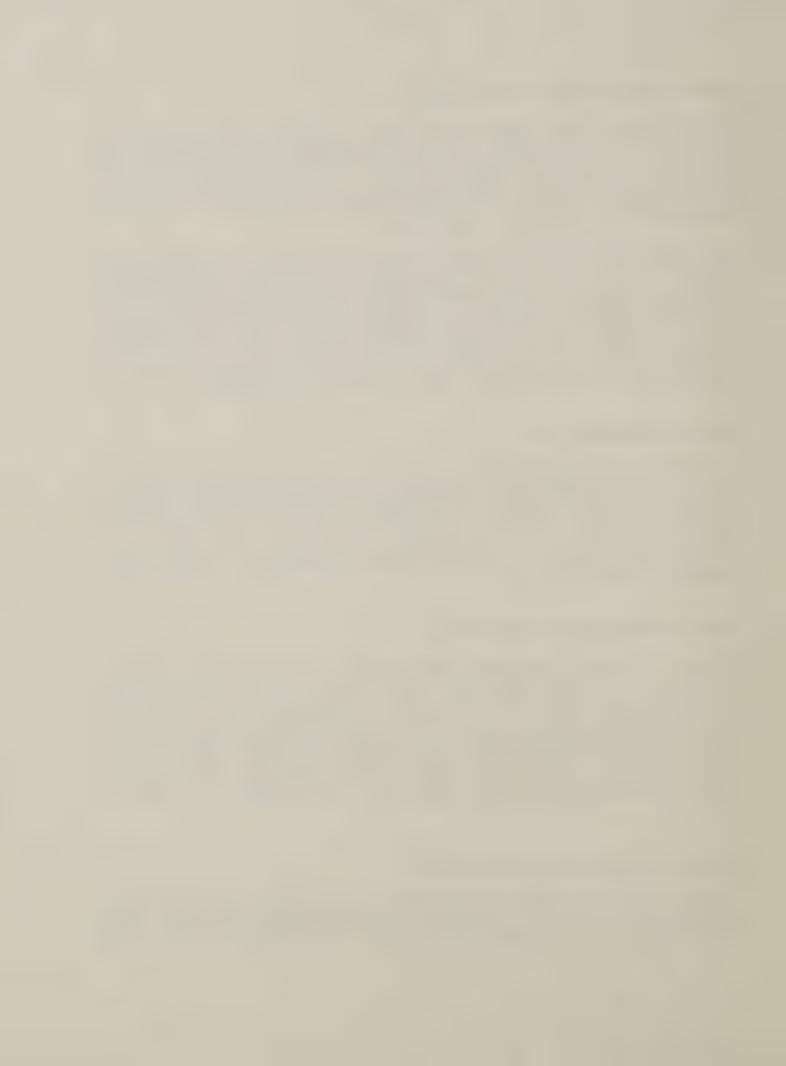
Chuck Mills, DASP Disaster Management Specialist, was in Indonesia November 17-22 to confer with forestry officials about the devastating series of fires that had been destroying tropical forests, oil palm plantations, and residential areas since September. This was the same area in Kalimantan that experienced significant fire losses of more than 9 million acres in 1982 and 1983. Over one million acres were affected by the drought-related fires in September 1987. This technical assessment helped to develop plans for a basic wildfire suppression course that was taught in Indonesia the following year.

Tunisia Grasshopper/Locust Control Project

In March, the American Ambassador declared a disaster in Tunisia because of a very serious outbreak of desert locusts, perhaps the worst since the 1950s. OFDA asked the Forest Service to mobilize a three-person team to provide support to the locust control programs in Tunisia. The team consisted of Herb Corn, Air Operations Coordinator, Boise National Forest, Idaho; Dick Stiliha, Logistics/Operations Coordinator, Shasta-Trinity National Forest, California; and Jim Walker, Communications Specialist, Bureau of Land Management, Boise Interagency Fire Center. The team also included two entomologists from Britain and the United States. The team members worked closely with counterparts in Tunisia, advising on air operations, logistics, and communication issues.

Morocco Grasshopper/Locust Control Project #2

Swarms of locusts invaded Morocco in March, infested a large area south of the Atlas Mountains extending from the northern part of the Western Sahara up to Morocco's northeastern coast on the Mediterranean, and threatened important crop areas. U.S. Ambassador Thomas A. Nassif



declared the invasion a potential disaster. Walt Friauf, Air Operations Specialist, Southwestern Region, USDA Forest Service, was dispatched to Morocco on April 5 for two months to coordinate the pesticide spray activities of two Turbo Thrushes for the A.I.D. Mission in Rabat. His duties included providing technical support to the U.S. Mission and local government officials having responsibility for planning and managing the locust control program, mostly in very remote areas where living conditions were difficult. Besides technical assistance during spraying operations, he provided guidance on the planning and execution of future missions. Between mid-March and the end of April, the Government of Morocco treated over 1,100,000 hectares, largely through aerial spraying operations.

Mexico Fire Assessment

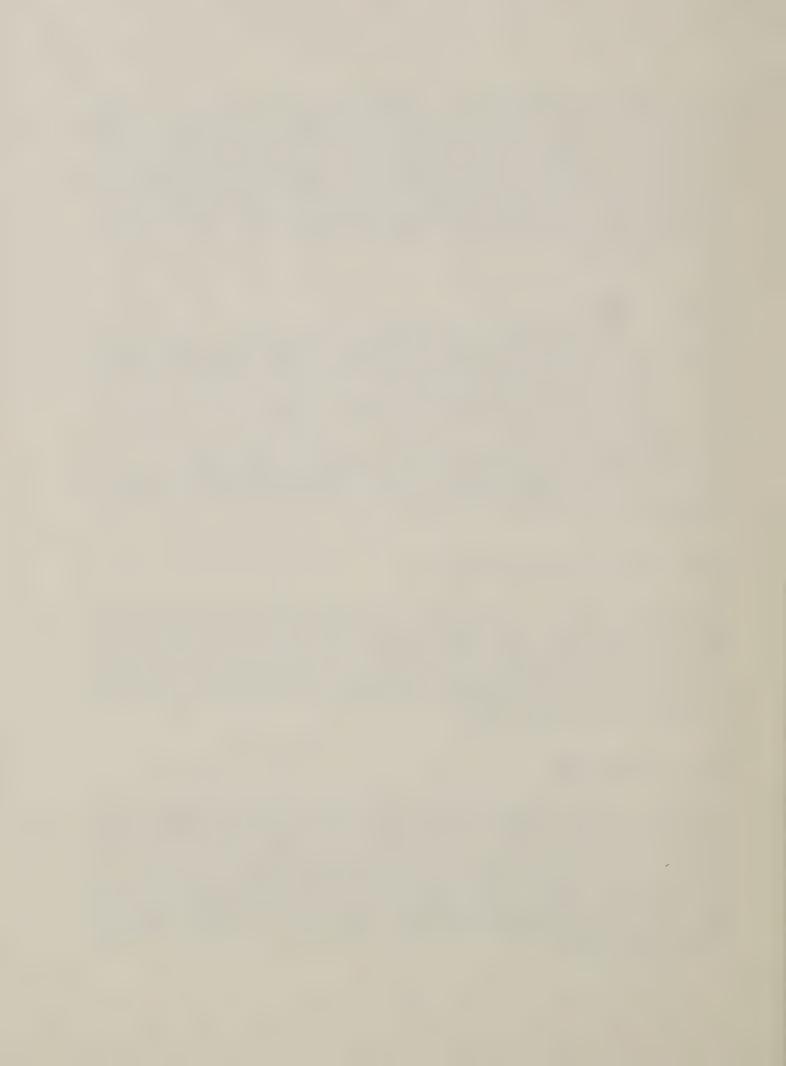
In early June, OFDA responded to a request from the American Embassy in Mexico requesting technical assistance support from the U.S. Forest Service to Mexican Forest Service officials in Sonora, Mexico. For several days a wildfire had been burning about 15 miles south of the border. Local officials were concerned the fire might cross over into Arizona, causing excessive natural resource damage in the U.S. Mexican officials wanted technical experts to make recommendations on the suppression effort. On June 7, 1988, four fire specialists from the U.S. Forest Service met with a Mexican official and journeyed to the fire location and performed the assessment. It was soon apparent the fire training previously given to the Mexican Forest Service officials had not yet filtered down to the local level and additional training of local personnel would have to occur. A later agreement between the Mexican Forest Service and U.S. Forest Service has been helpful in implementing local training.

Sudan Grasshopper/Locust Control Project

In August, at the request of the Sudanese government, the U.S. Ambassador declared the Sudan grasshopper/locust outbreak a disaster and requested OFDA assistance. Ron Libby, Disaster Assistance Support Program; Lynn Thomas, Southern Region, USDA Forest Service; and Don Albright, Northeast Region, APHIS, departed the United States on August 20 for assignment in central Sudan to support an aerial pesticide application program. Libby and Thomas served as Air Operations and Logistics Specialists while Albright served as an entomology specialist working primarily in the Red Sea coastal region.

Jamaica Hurricane Gilbert

September 16 through October 15, 1988, Kim Peterson, Communication Specialist, Bureau of Land Management, Boise Interagency Fire Center, Boise, Idaho, responded to a call for assistance from the U.S. Ambassador in Jamaica. Also involved were other personnel from USAID, OFDA, Department of Defense (DOD), Pan American Health Organization (PAHO), and OFDA's technical support team based in Costa Rica. Hurricane Gilbert had caused major damage to the infrastructure of the country. The team made assessments and provided technical support and onsite supervision during the relief activities. Peterson was responsible for providing and maintaining critical communications for Jamaica's Office of Disaster Preparedness, which has responsibility for all Jamaican relief efforts.



Bangladesh Flood

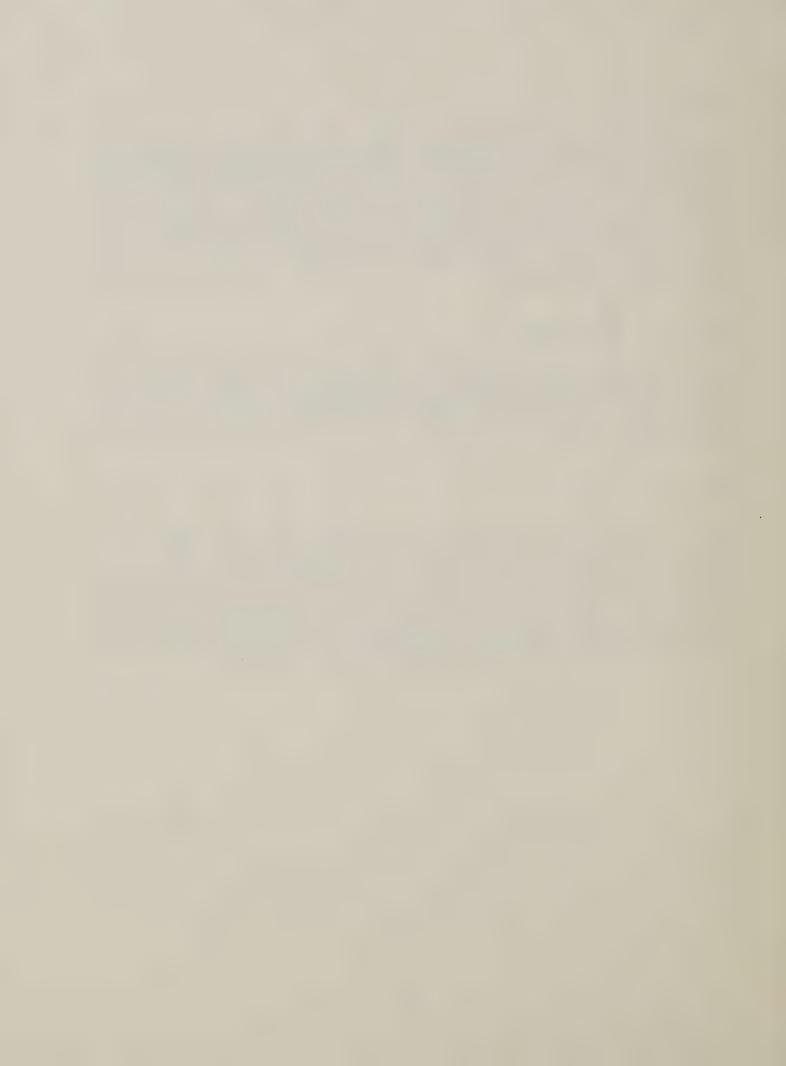
In September, DASP helped send disaster specialists to Dacca, Bangladesh, to assist the U.S. Mission in providing relief to the flood victims. Among the experts dispatched were Barry Stern, Toiyabe National Forest, Nevada; Bruce Bayle, North Carolina National Forest; and Chuck Mills, DASP. The other experts included personnel from the Centers for Disease Control (CDC), Atlanta; OFDA; A.I.D.; DOD, and non-government civilian contractors. The team provided technical support and supervision during the distribution of U.S.-donated commodities, managed the water purification units, and taught operational procedures to the locals. They conducted health surveys, constructed temporary shelters, provided communication systems, and furnished administrative support to the mission.

Mauritania Locust Response

Richard Dysart, Research Entomologist/ARS, and Billy Tanner, Plant Protection and Quarantine Pilot/APHIS, participated on an assessment team responsible for evaluating grasshopper/locust control efforts in Mauritania. From September 14 to October 11, 1988, Dysart assessed the environmental effects of pesticide use and Tanner evaluated the feasibility of a large plane aerial spraying effort.

Yellowstone Fire Control

The Boise Interagency Fire Center called OFDA on August 30 with a dispatch order for Bob Mutch to report to the Unified Area Command, Yellowstone National Park. OFDA agreed to the dispatch and Bob Mutch arrived at Area Command's Operations Center at the site of the Yellowstone wildfires on September 1. For the next two weeks he worked within the Planning Section in Area Command, establishing a Fire Behavior Service Center and helping fire overhead teams on the nine major fires that burned over one million acres in the Greater Yellowstone Area. In mid-September he was appointed to an Interagency Task Force that prepared a Fire Situation Report for the Congressional Oversight Hearing that occurred on September 29.



PREVENTION

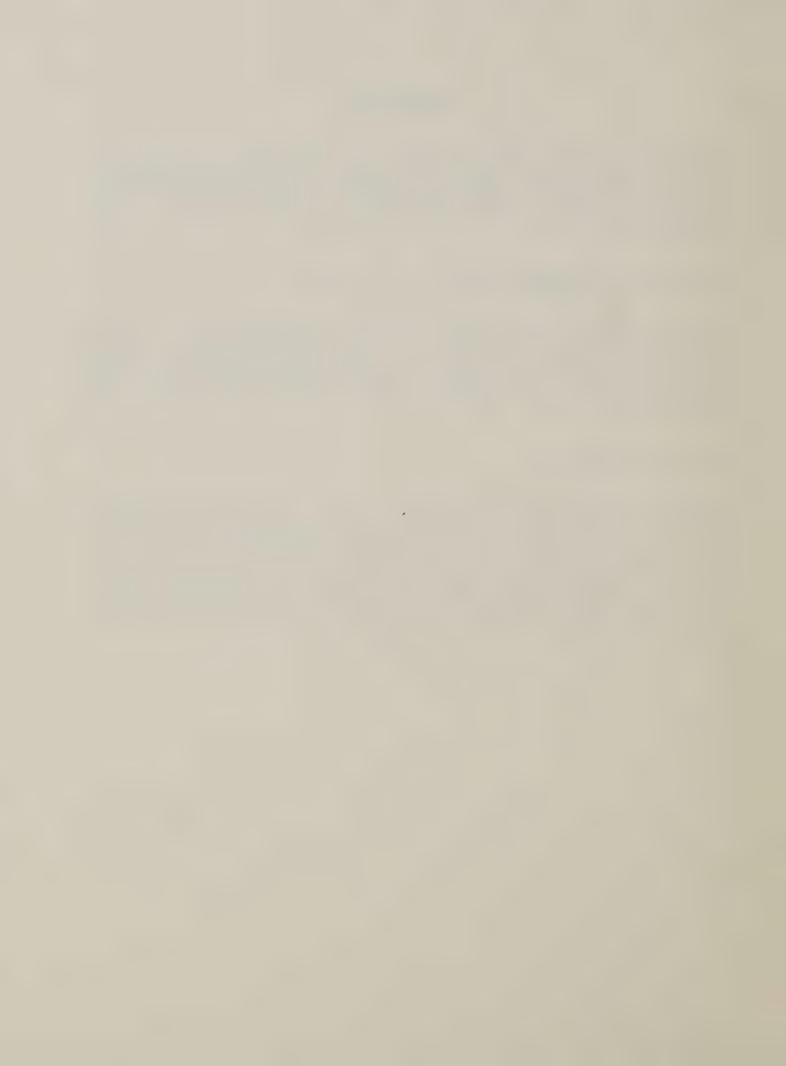
A major role undertaken by DASP is coordination of natural resources emergency management programs. Ideally, governments and the public should be so well prepared through education programs and regional planning efforts that societies are in a position to prevent or lessen the impact of potential hazards. In 1988, several such international programs were developed and are discussed below.

St. Vincent and The Grenadines Landslide Hazard Assessment

In November 1987, Jerry DeGraff, Forest Service geologist from the Sierra National Forest in California, conducted a 3-week landslide hazard assessment at the request of the St. Vincent and the Grenadines government. Landslides in this area generally impact hydroelectric generation facilities, residential water supply lines, roads, and cultivated fields. Such assessments can be used in regional planning to reduce the threat of landslides to transportation systems, homes, and other capital investments.

Israel Forest Fire Evaluation

Catastrophic fire losses in Israel recently prompted the Jewish National Fund in the United States to request a team of USDA Forest Service fire management specialists to review Israeli fire problems. The three-person team traveled throughout the country December 2-11, meeting with Israeli resource professionals on the current fire management situation. Their report, made available to OFDA, recommended actions in the following areas: fire cause investigation and forest fire prevention, communications, fire detection and reporting, fire danger analysis, fire management and training, fire suppression readiness, fuels management, research and development, and a visit by Israel's Forest Department specialists to the United States.



PREPAREDNESS

Preparedness is a key element in the role of any emergency response organization. DASP carried out several preparedness activities for OFDA in 1988 to improve disaster responses. They are discussed below.

Argentina Wildfire Suppression

OFDA received two requests from Argentina for technical assistance in wildfire suppression. This follows a fire management assessment in 1985, a communications assessment and wildfire training course in 1986, and a wildfire assessment in 1987. The first proposal was for a technical exchange that would send two U.S. fire specialists to Argentina in January and February to provide fire danger rating and fire prevention assistance. Two Argentines would then review fire management programs in the U.S. during September and October.

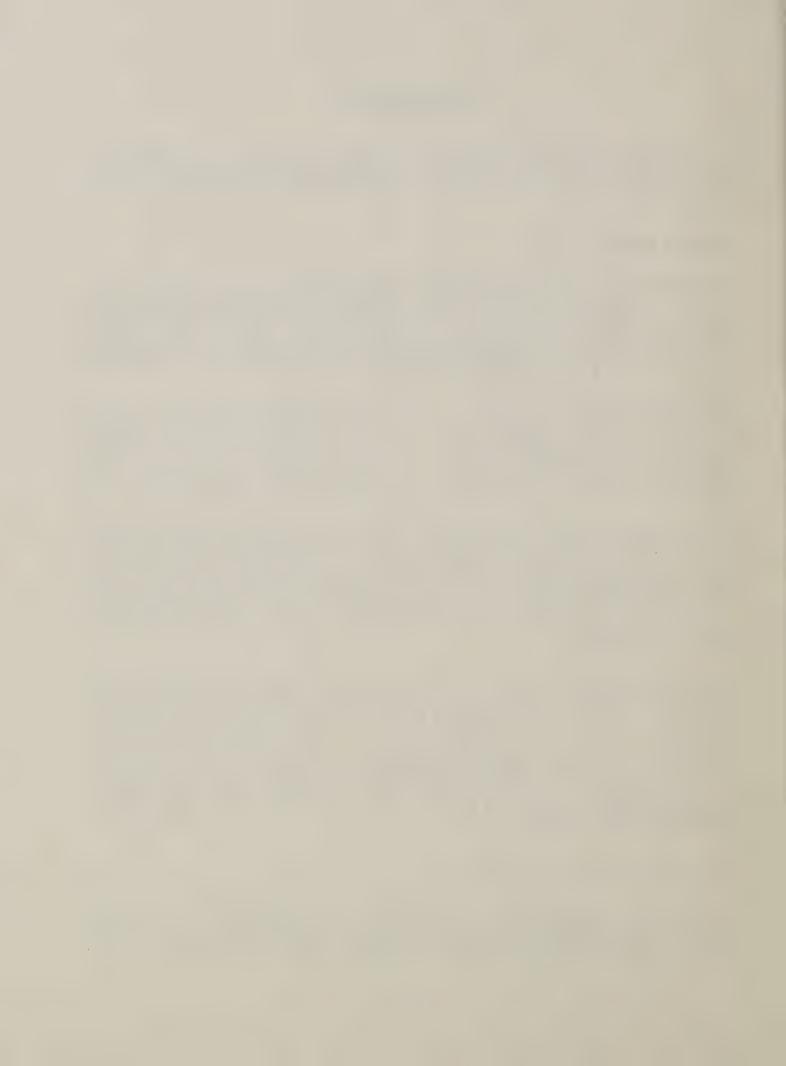
The second proposal came to OFDA as a result of the severe wildfires that occurred in southern Argentina in early 1987. Following the fire season, the Patagonian Provinces, the National Parks Administration, and the Civil Defense agreed to develop a three-risk level wildfire organization system. The Director of IFONA, Argentina's Forest Service, requested a U.S. Forest Service fire management specialist to come to Argentina in January and February to serve as an advisor in this effort.

A roster search for experts with mid-level to senior-level fire management skills and Spanish fluency identified 29 individuals including 11 Forest Service or retired Forest Service employees. In January, Doug Turner, fire management specialist from the Bridger-Teton National Forest, Intermountain Region, was dispatched to Bariloche, Argentina, to advise Argentina's Forest Service on the use of an interagency and interprovincial approach for fire detection and initial attack. IFONA also requested Turner's assistance on four wildfires during his stay--two near Bariloche and two in Chubut Province.

Bob Partido, Southwestern Region, and Tom Rios, Boise Interagency Fire Center, arrived in Argentina in February to make recommendations to IFONA on how to fight fires that escape initial attack. They also covered such topics as communications, fire danger rating, dispatch, fire coordination, and training. A large assortment of guides, manuals, handbooks, and lesson plans were taken to Argentina as fire management references. As a result of their assistance, IFONA advised the U.S. it wished to significantly expand the number of people to 16 for a technical fire management exchange in the western United States in August 1988. Forest Service Units in California, Montana, and Wyoming hosted the exchange, providing diverse fire management experiences for the participants.

Bahamian Fire Management Assistance

The Bahamian Government, Department of Lands and Surveys, asked the United States to provide assistance in fire management and in prescribed burning for hazard reduction purposes on Abaco Island. At OFDA's suggestion, DASP helped identify two technical fire management specialists



who visited the site and prepared a report for the Bahamian government. The report listed recommendations for detection, suppression, fire danger rating, and prescribed burning.

Emergency Management Electronic Bulletin Board

The Forest Service agreed to sponsor and fund an electronic bulletin board trial at OFDA. The purpose of the electronic bulletin board is to share international emergency management and search and rescue information among a variety of agencies and organizations. Benefits from the computer-accessed bulletin board should include improved awareness and understanding among emergency management responders, a higher degree of preparedness for international disaster dispatches, and spin-off advantages for domestic emergency management programs.

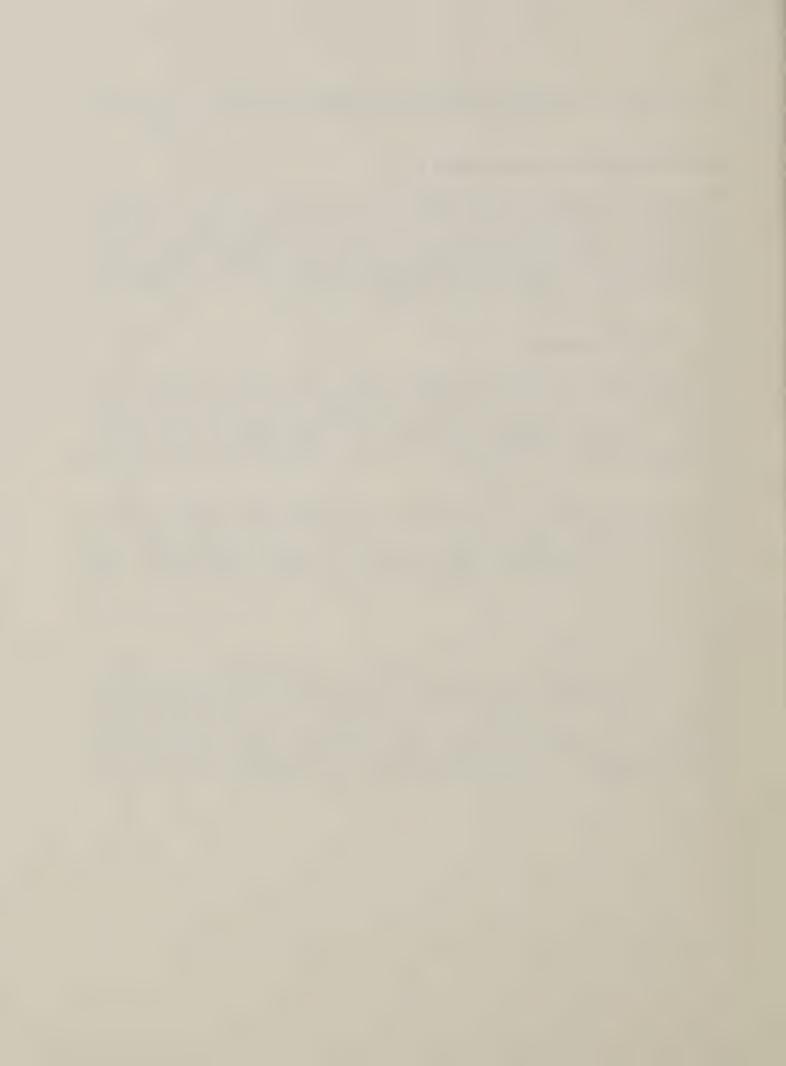
Roster Managers' Workshop

The Natural Resources and Disaster Management Roster Managers' Workshop, held July 14 in Washington, D.C., was sponsored by the USDA Forest Service's Forestry Support Program, DASP, and by USDA's OICD. The objectives were 1) to share information about existing natural resources and disaster management rosters, 2) to review roster management issues, including recruitment, maintenance, costs, legal considerations, and retrieval of data, and 3) to explore opportunities for inter-roster cooperation.

Twenty-eight organizations attended the workshop, with each participating organization presenting a summary briefing of its objectives for maintaining a roster, skill areas, management practices, and application procedures. Specific roster management issues discussed during sessions were recruitment, computerization, maintenance, costs, legal considerations, and cooperation. The information was summarized and compiled in a report available from DASP.

Skills Inventory/Organizational Development

Cathy Scofield, U.S. Forest Service, worked with OFDA in August to develop a skills inventory system. The system will help provide an analytical method of evaluating knowledge and experience of new staff members and cooperators, who may be called upon to support OFDA's disaster response activities. Myra Marshall from NARTC, Marana, Arizona, aided Chuck Mills in developing position descriptions for the resource coordination section of OFDA's Disaster Response Organization. The development, training, and use of this section will increase interaction with many institutions that work with OFDA to manage disaster responses.



TRAINING AND SIMULATIONS

OFDA and DASP have supported and funded a diverse array of training programs and courses to improve the preparedness and response of people, organizations, and agencies to natural disasters. Highlights of 1988 programs are noted below.

Ghanaian Fire Training

A Ghanaian Fire Management Assistance Program that began three years ago with an assessment and recommendations by Forest Service fire management specialists, culminated in a two-week Wildfire Suppression Training Course in Ghana November 30 to December 11, 1987. The objective of the course was to train 50 members of the Ghanaian National Fire Service and cooperating agencies in basic fire behavior, wildfire prevention and suppression, and the use of fire fighting tools. Trainees are qualified to serve as trainers upon course completion. Participants at the Afienya Youth Leadership Training Institute received formal classroom instruction in fire behavior, firefighting, crew boss procedures, wildfire prevention, and prescribed fire and fuels management during the first week. The second week was devoted to field exercises at the Shai Hills Game Reserve. They included use of hand tools and fire line construction, suppression strategy and tactics, practical applications on training fires and application of the Incident Command System. The U.S. training team included Team Leader John Chambers and instructors Steve Servis, Doc Smith, and Ralph Velasco.

Fourth International Fire Suppression Course

The Fourth International Fire Suppression Course was held in Mexico City from January 25 to February 12. The course was sponsored by OFDA and the Mexican Forest Service. It trained 50 participants from Mexico, Central America, and South America in the basics of fire suppression, initial attack, tool use, fire behavior, and prescribed burning for hazard reduction purposes. Teaching were 23 instructors from Mexico, Spain, Chile, Costa Rica, and the United States, including the first female instructor. Spain agreed to host and significantly fund the 5th International Course to be held in Spain in the fall of 1989 or 1990. This course will be an Advanced International Fire Course for graduates of the previous four courses.

Venezuelan Earthquake Simulation Exercise

Chuck Mills participated in an earthquake simulation exercise in Caracas, Venezuela, during the week of January 18. The purpose of the exercise was to provide an opportunity for the U.S. Embassy Disaster Response Team to interact with the host government, OFDA, and U.S. military during a simulated earthquake incident. Objectives of the exercise included exercising and evaluating the Mission disaster plan, relief preparedness, staff structure, and coordination of interagency relationships. Mission disaster relief response was tested and included priority setting, decision making and follow-up, application of guidelines and procedures, integration of military assistance, information management, team interaction and capability to implement plans, and the adequacy of the disaster relief operations center. The six-hour exercise included OFDA/Costa Rica,



the U.S. Military Southern Command, the U.S. Embassy, and the Disaster Assistance Support Program.

European Earthquake Simulation Exercise

Chuck Mills served as the Project Leader of a European Earthquake Simulation Exercise that was held at the Office of U.S. Foreign Disaster Assistance on March 16, 1988. Objectives of the exercise were to test OFDA operational procedures for a worldwide disaster, validate OFDA's contingency plan for a European disaster response, and orient new staff members and cooperators to OFDA's disaster response procedures.

Two different teams ran the simulation exercise, with over 100 people involved, including the control team, exercise participants, and observers. The earthquake contingency plan served as a working document to guide simulation team members in making appropriate responses to disaster conditions and to guide OFDA if there was an actual earthquake in Europe. The simulation exercise taught team members to understand disaster management positions and duties, track the flow of information, document decisions, determine and update the status of the immediate situation and available resources, interact with the media, and prepare and give briefings.

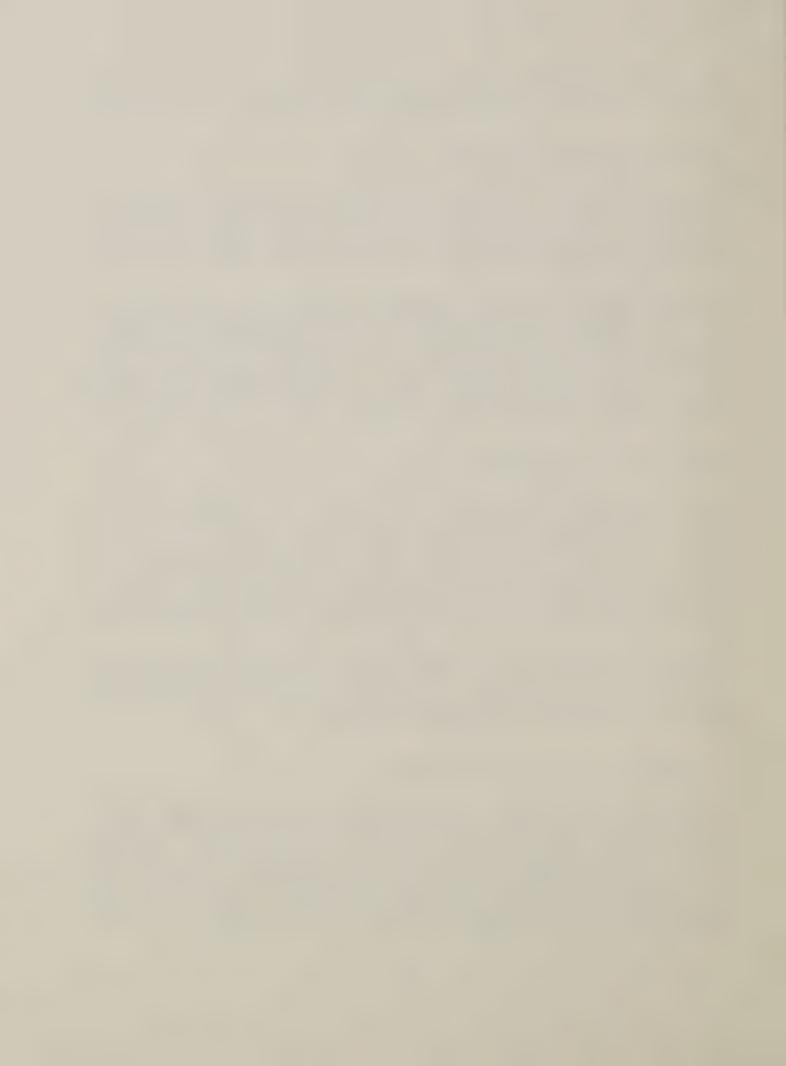
Training Development and Management Course

A training development and management course offered by Jerry Williams, at the Federal Emergency Management Agency's Emergency Management Training Center, Emmitsburg, Maryland, was held in March for trainers and those who manage OFDA training courses and programs. The purpose of the course was to train participants to develop and manage training programs. The subject matter included job performance requirements, development of performance and instructional objectives, training needs analysis, qualification testing, training design, audiovisual aid preparation, exercises and activities, training validation, training development workshops, training funding alternatives, curriculum design, and instructor selection and training.

Seventeen people participated in the training session, representing Argentina, Costa Rica, Jamaica, and the United States. Organizations included PAHO, the Organization of American States (OAS), A.I.D., Partners of the Americas, Metro Dade Fire Department, USDA Forest Service, the Red Cross, and the Disaster Management Service in Jamaica.

Landslides and Hazard Assessment Training Manual

The Organization of American States has a continuing interest in reducing the threat of natural hazards to people in Latin America. Jerry DeGraff, Sjerra National Forest, Pacific Southwest Region, began development of a training manual and series of lesson plans for a 4-week course in landslide hazard assessment. Course materials include a description of factors influencing landslides, instructions in applying hazard assessment procedures and preparing landslide hazard maps, a training manual to prepare other people to make landslide hazard assessments, exam questions, homework exercises, recommended readings, and reference handouts. The course will



be a combination of lectures, lab exercises, demonstrations, and field exercises. The training manual will be translated into Spanish for use in Latin America and the Caribbean.

Disaster Operations Management Course

A development workshop for a disaster operations management course took place at Harpers Ferry, West Virginia, June 20-24, 1988. The workshop provided the opportunity for subject matter specialists in disaster response activities to work together to complete the preliminary work needed to prepare final training materials. The course will be able to be conducted in any English-speaking country.

Representatives from Costa Rica, Peru, Chile, Jamaica, and Barbados, along with personnel from Partners of the Americas, the Pan American Health Organization, the Office of Foreign Disaster Assistance, the University of Wisconsin, INTERTEC, Dade County Fire/Rescue and the U.S. Forest Service, participated.

Indonesia Fire Training

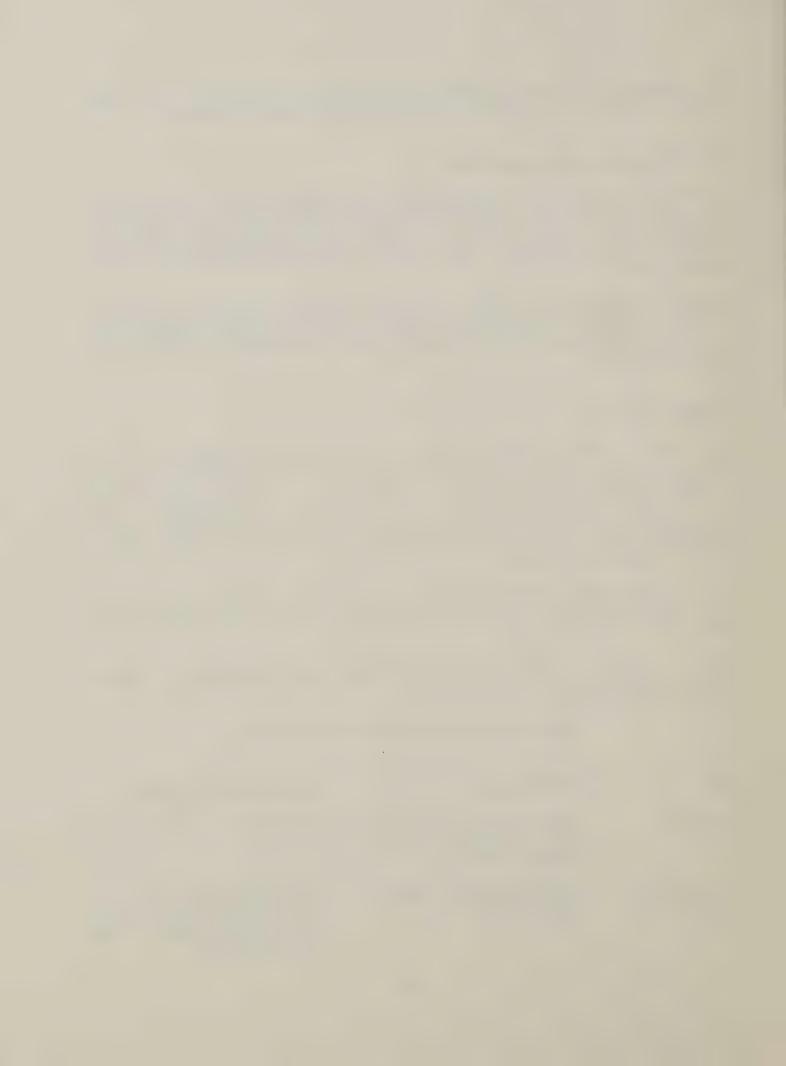
On August 4-18, 1988 a Wildland Fire Training Team, composed of individuals from the U.S. Forest Service, National Park Service, and North Carolina Division of Forest Resources, conducted a wildland fire suppression training course in Jakarta, Indonesia. The team trained 40 foresters from 9 provinces throughout Indonesia in the fundamentals of wildfire suppression. These individuals will initiate follow-up training programs at the local level. The training activity was supported by OFDA, U.S. Forest Service, Indonesia's Department of Forestry, and the Indonesia Disaster Management Organization.

Training team members included Team Leader Steve Pedigo, Forest Service, Cheryl Maddux and Whit Lerer, Forest Service, John Shepherd, North Carolina Division of Forest Resources, and Ken Hulick, National Park Service.

Below is a listing of all training and simulation activities attended or supported by the Disaster Assistance Support Program.

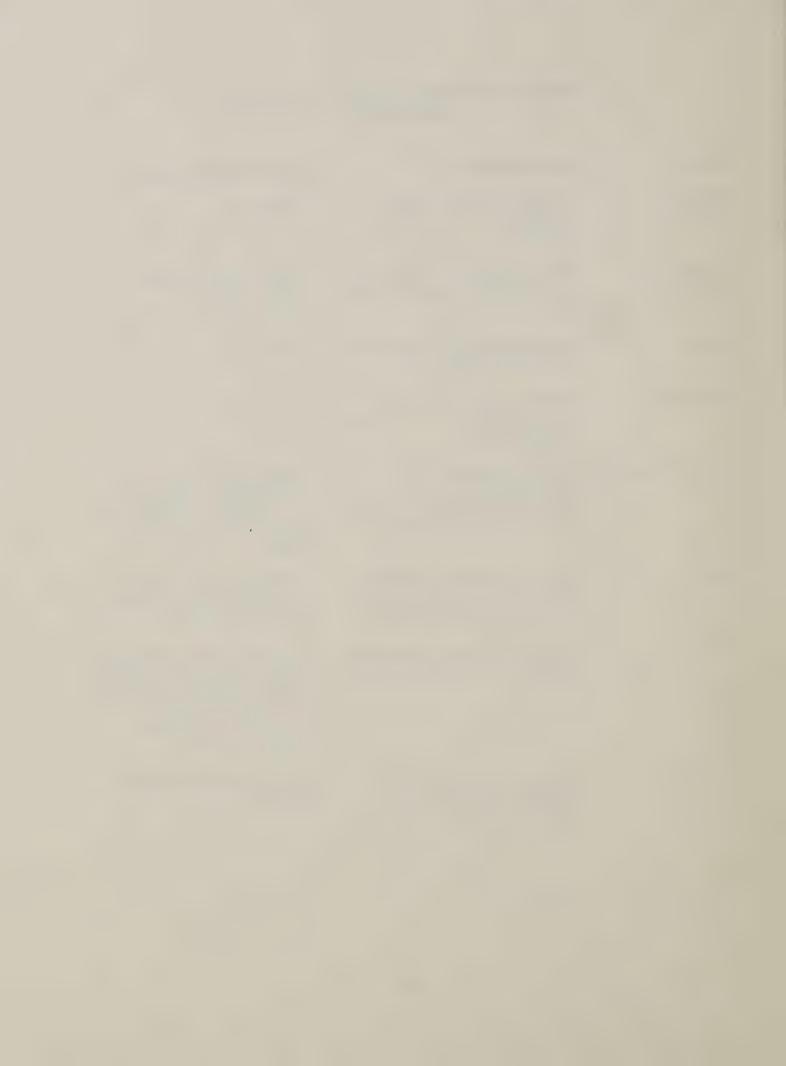
Fiscal Year 88 Training Courses and Simulations

<u>Date</u>	Training Activity	Responsibility/Participants
November	Served as an instructor/evaluator in Disaster Management Course in Bangkok, Thailand	Chuck Mills
November 30 to December 11	Wildfire Suppression Training Course in Ghana	50 participants from the Ghanaian National Fire Service and cooperating agencies (4 Forest Service instructors)



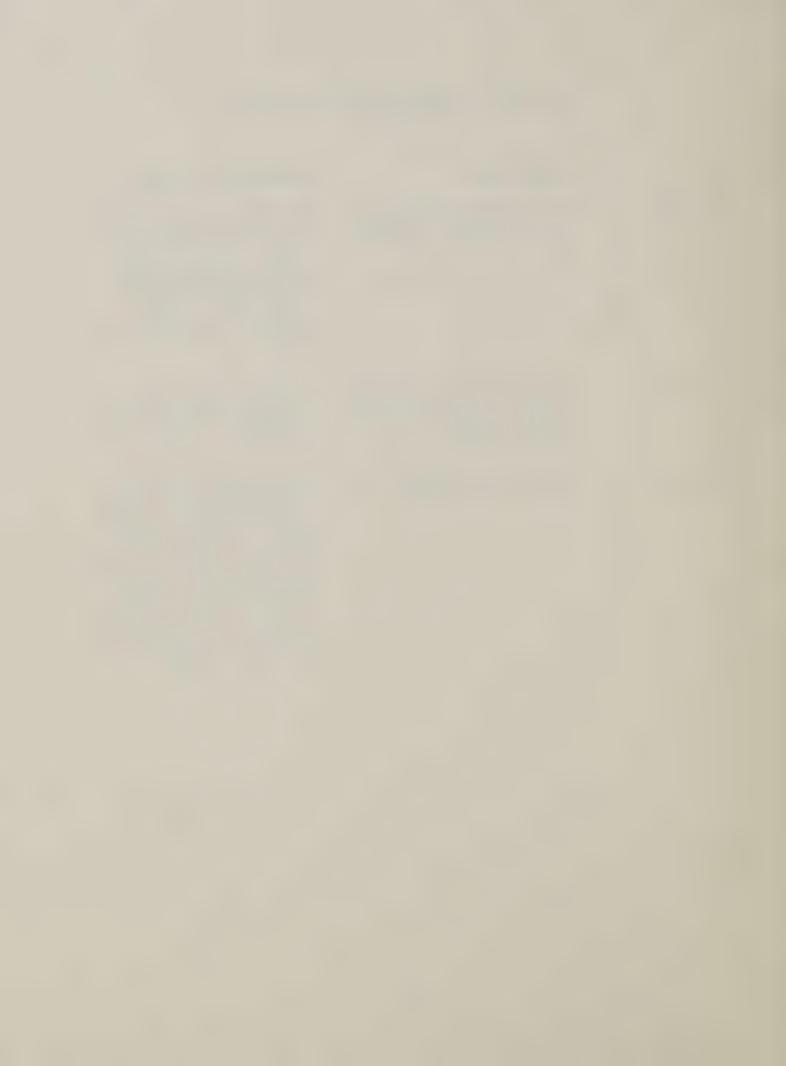
Fiscal Year 88 Training Courses and Simulations (Continued)

<u>Date</u>	Training Activity	Responsibility/Participants
Week of January 18	Participation in an earthquake simulation exercise in Caracas, Venezuela	Chuck Mills
January 25 to February 12	4th International Fire Suppression Course for Latin America in Mexico City	OFDA and serveral Forest Service instructors
March	Attended a Fairfax County search and rescue training session	Chuck Mills
March 16	Served as Project Leader of a European Earthquake Simulation Exercise at OFDA	Chuck Mills
Week of March 21	Training Development and Management Course at the Emergency Management Training Center, Emmitsburg, Maryland	Facilitated by contractor Jerry Williams. Assisted by Dee Williams and Ted Butler of the Forest Service's Northern Region
May	Instructor Training and Training Development and Management Course in San Jose, Costa Rica	Facilitated by Jerry Williams. Attended by 16 Latin American participants in San Jose
May 4-9	Attended the Disaster Management Workshop in San Jose, Costa Rica	Bob Mutch; design development and production by Jerry Williams; Armando Gonzalez-Caban served as instructor; attended by 60 participants from 18 Latin American countries
June	Participate in a Forest Service- sponsored On-the-Job Training Program in Arizona	Two fire management specialists from Chile



Fiscal Year 88 Training Courses and Simulations (Continued)

<u>Date</u>	Training Activity	Responsibility/Participants
June 20-24	Disaster Operations Management Course Development Workshop at Harpers Ferry, West Virginia	Participants: representatives from Costa Rica, Peru, Chile, Jamaica, Barbados, with personnel from Partners of the Americas, Pan American Health Organization, OFDA, Univ. of Wisconsin, INTERTEC, Dade County Fire/Rescue and the U.S. Forest Service
August 3-6	Assisted Government of Argentina officials in conducting a week-long workshop on Disaster Management Planning in Buenos Aires	Armando Gonzalez-Caban; attended by Regional Disaster Management Coordinators from various regions of country
August 4-18	Conducted Wildland Fire Training course in Jakarta, Indonesia	Wildland Fire Training Team from Forest Service in Region 8 and personnel from the National Park Service and North Carolina Division of Forest Resources. A joint effort of OFDA, U.S. Forest Service, Indonesia's Department of Forestry and The Indonesia Disaster Management Organization. Attended by 40 foresters from 9 provinces in Indonesia.



MEETINGS & WORKSHOPS

Throughout the year, meetings and workshops give DASP the opportunity to coordinate, communicate, and plan disaster assistance activities with other professionals in the field. The Grasshopper/Locust Control Campaign Workshop highlighted the year's activities.

Grasshopper/Locust Control Campaign Workshop

Seventy people from Africa and throughout the United States attended the Grasshopper/Locust Control Campaign Evaluation Workshop held in Harpers Ferry, West Virginia, on January 18-21, 1988. The purpose of the workshop was to review the 1986-1987 grasshopper/locust campaign and provide direction to improve future campaigns. A major product of the workshop was development of a plan for an operations guidebook for missions to provide direction for future grasshopper/locust management programs. The guidebook has been written by expert government contractors and government authors from the USDA Forest Service, A.I.D., ARS, APHIS, OFDA, and the Bureau of Land Management.

The Disaster Assistance Support Program participated in the following meetings and workshops in 1988.

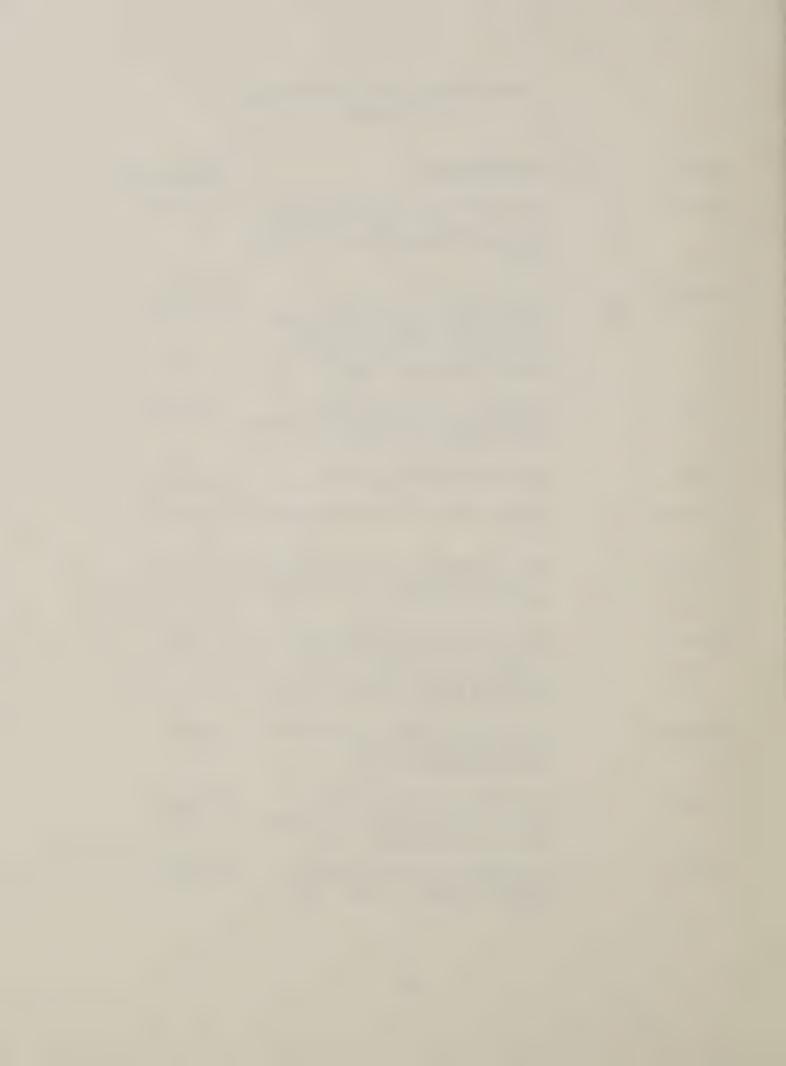
Fiscal Year 88 Meetings and Workshops

<u>Date</u>	Meeting/Workshop	Responsibility
October	Evaluate Texas A&M's emergency management program to determine feasibility of future use by OFDA for training disaster management specialists from South America	Chuck Mills
October	Attend a Steering Committee meeting for the International Wildfire Protection Conference in Ottawa, Canada	Bob Mutch
October	Meet with Canadian International Development Agency's (CIDA) International Humanitarian Assistance Office	Bob Mutch
October	Present training on the organization and structure of the Incident Command System at the Flood Mitigation Workshop in Argentina	Armando Gonzalez-Caban



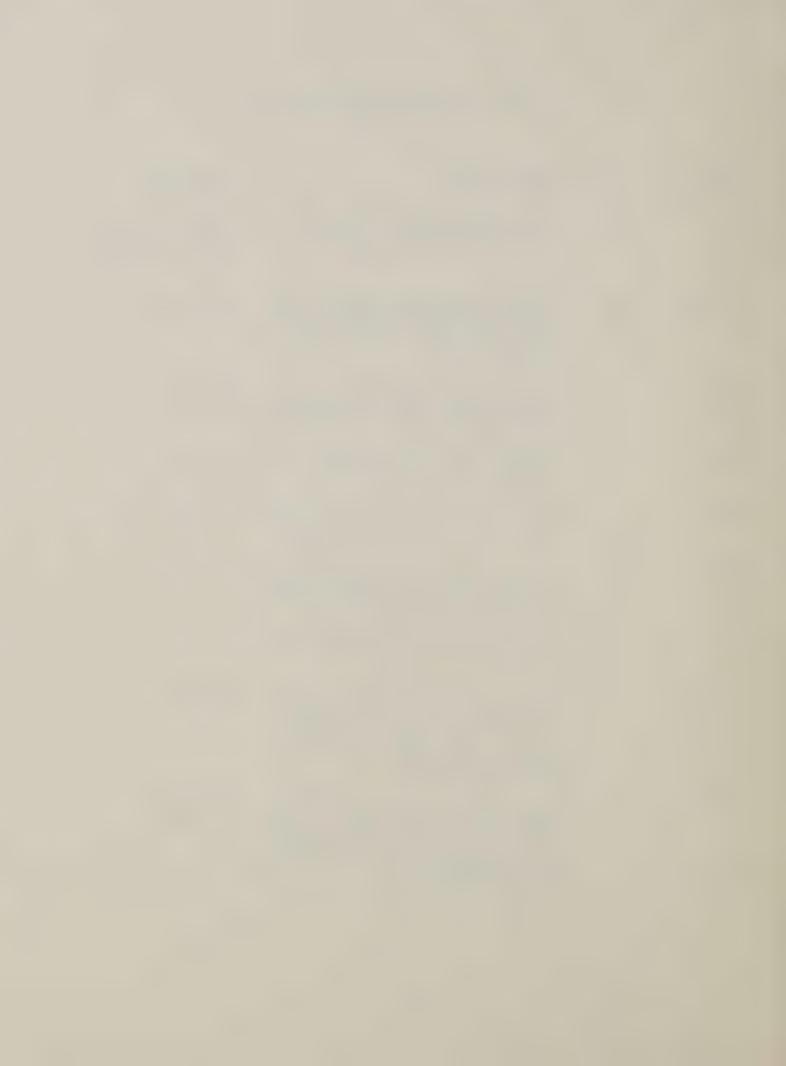
Fiscal Year 88 Meetings and Workshops (Continued)

Date	Meeting/Workshop	Responsibility
October	Attend International Fire Chiefs' meeting in Mexico. Plan with personnel from California and Mexico for Search Conference scheduled for 1988	Chuck Mills
October	Attend meetings with Forest Service telecommunications specialists Neal McGill and Steve Werner regarding electronic bulletin board for search and rescue and emergency management purposes	Bob Mutch
October	Meeting on the Interagency Incident Management Communication System that has been planned for use in the U.S.	Chuck Mills
October	Meeting between OICD and OFDA	Bob Mutch
November	Complete planning for Disaster Management Course	Bob Mutch
November	Made presentation on "International Disaster Response" at the Far East Conference and Exhibition in Hong Kong	Chuck Mills
November-	Attend meeting with A.I.D./Washington personnel to develop format for the Grasshopper/Locust Campaign Evaluation Workshop at Harpers Ferry, West Virginia	Bob Mutch
November	Attend Steering Committee meeting for the 1989 International Fire Protection Conference to be held in Boston	Bob Mutch
December	Attend meeting with Dr. Riley Chung, National Research Council, on International Decade for Natural Disaster Reduction	Bob Mutch
January	Grasshopper/Locust Control Campaign Evaluation Workshop in Harpers Ferry, West Virginia	Bob Mutch



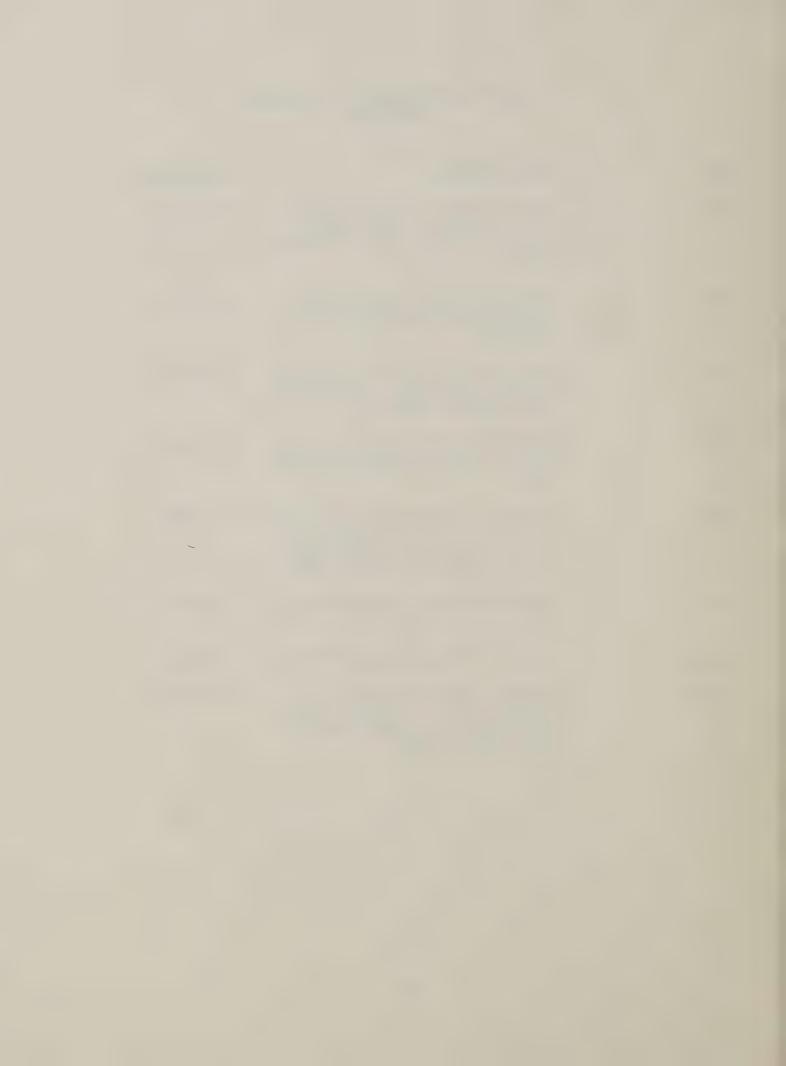
Fiscal Year 88 Meetings and Workshops (Continued)

Date	Meeting/Workshop	Responsibility
January	Provide personnel to assist with a planning meeting for an emergency management course to be offered in Costa Rica	DASP providing: Jerry Williams, Augusta Crino and Armando Gonzalez- Caban
February	Attend Steering Committee meeting for the International Wildfire Protection Conference hosted by the National Fire Protection Association in Boston	Bob Mutch
April	Attend Steering Committee meeting for July 1989 conference on Meeting Global Wildland Fire Challenges, in Boston	Bob Mutch
April	Meeting to design a Roster Manager's Workshop scheduled for July 14, 1988	Bob Mutch
May	Program Committee meeting to finalize plan for the 1989 International Fire Conference	Bob Mutch
May	Meeting with National Advanced Resource Technology Center (NARTC) Director Ken Dittmer and Training Specialist Bonnee Turner on the role of NARTC in the development of international training courses for OFDA and other services	Bob Mutch
May	Meeting with Training Specialist Luisa Alfaro of Costa Rica's Park Service on the 4th International Fire Suppression Course and her interest in developing a fire prevention program for Costa Rica	Bob Mutch
May	Visit to several fire departments in Southern California for sharing information on current search and rescue activities and to establish a coast-to-coast network for communicating and sharing technical expertise	Chuck Mills



Fiscal Year 88 Meetings and Workshops (Continued)

Date	Meeting/Workshop	Responsibility
May	Present overview of OFDA's operation and the DASP Program for the Southern California Association of Foresters and Fire Wardens	Chuck Mills
May	Meeting on production schedule for the Africa Grasshopper/Locust Control Guidebook	Bob Mutch
June	Attend cadre meeting on Indonesia, OICD operations, OFDA's mission preparations for Indonesia Fire Training course	Chuck Mills
July	DASP Exhibit for National Forest Service Civil Rights Committee Meeting in Portland, Oregon	Bob Mutch
July	Meeting of fire management and fire weather personnel to review past fire management assistance programs and recommend future fire management opportunities to OFDA	Bob Mutch
July	Meeting to develop an Urban Fire Strategy Policy	Chuck Mills
August	Organize a Medical Responder's Workshop	DASP Staff
August	Meeting to develop an Operations Procedures Manual to be used by OFDA staff in Washington to support foreign disaster response activities	OFDA Staff



FOREST SERVICE COMMITMENT TO INTERNATIONAL ASSISTANCE

Forest Service employees long have enjoyed whole-hearted commitment by the Chief of the Forest Service to international assignments in support of the Agency for International Development and other organizations. The following excerpts from a 1989 letter the Chief sent to Forest Service field offices indicate the level of his commitment.

"Since the development of a formal working relationship in the early 1980s between the Forest Service and the U.S. Agency for International Development through USDA's Office of International Cooperation and Development, all Regions, Stations, NE Area, and Washington Office staffs have provided many technical specialists to carry out international assignments. These have included numerous work details in Latin America and the Caribbean, Africa, and the Asia/Pacific region, as well as in the United States. Foresters, engineers, entomologists, geologists, economists, planners, fire specialists, training officers, computer specialists, air operations specialists, and many others within the Forest Service have had numerous opportunities to apply their skill and knowledge to critical global problems. The problems have included deforestation, recovery of degraded lands, sand dune stabilization, landslide hazards, wildfire threats to tropical forests, locust plagues, human hunger, and hurricanes and floods. Our people have been able to make significant contributions to the forestry and natural resource programs of other countries, and we have helped them during their time of need to alleviate human suffering and reduce the impacts and threats to scarce natural resources. Agency for International Development repeatedly has commended the Forest Service for these valuable contributions.

I personally appreciate the substantial support that Forest Service units have devoted to the A.I.D.-sponsored Forestry Support Program, Disaster Assistance Support Program, various international organizations, and to other international activities. Such cooperation expands our important mission of caring for the land and serving people to include our essential and vital participation in the global community as well. The Forest Service gains in at least two ways from such participation. First, our commitment to share appropriate technology in order to help others reflects favorably on the Agency and on the United States in the eyes of the world community. Second is the fact that our people are able to gain invaluable and rather unprecedented career development opportunities through these assignments as they work on challenging projects with a diverse array of government agencies and cultures. As our people return home from international assignments, they bring with them new insights and perspectives that can only strengthen our work force and our programs. We have heard from many of you that such work details have served to improve employee morale and enthusiasm and have often led to innovative approaches to problem solving here at home."



Those in the Disaster Assistance Support Program look forward to the continued excellent working relationships with Forest Service units and other agencies and organizations as we fulfill the objectives of our close partnership with the Agency for International Development. As we approach the decade of the 90s--the decade for natural disaster reduction--we know that the opportunities will be both challenging and rewarding.

Those is no flooder Austenner Surject to manufact forward to no estimate socialist writing the extended with the solution of the solution of the solution of the Service solution of the Arene solution of the Sharts solution or an above or and the solution of the Sharts and consider the solution of the Sharts solution or an above or and the solution of the solution of the Sharts solution or an above of the solution of the Sharts solution or an above or an above or an above or an above or and the solution of the solution



